

The Bundeswehr in the 21st Century – between Prussia's Glory and Design

A Monograph

by

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Abstract

THE BUNDESWEHR IN THE 21ST CENTURY – BETWEEN PRUSSIA’S GLORY AND DESIGN by Lieutenant Colonel (GS) Michael Schoy, German Army, 52 pages.

This monograph is meant to inspire military professionals to approach Prussian military history as a source of concepts with enduring relevance for modern armed forces. Reference point for the examination is the *Bundeswehr* (German armed forces) and its ongoing transformation to an all-volunteer armed force. The future of a professional *Bundeswehr* is not merely a question of financial resources, organization, or troop strength; it is also a question of leadership culture and military effectiveness in an increasing complex operational environment. Therefore, this paper aims to support the ongoing reform process in the *Bundeswehr* by providing scope for reflection on traditional German military organization, education, and thinking.

Starting point of the examination is General Gerhard von Scharnhorst who became the intellectual head of a group of military reformers that reorganized the Prussian Army after her disastrous defeat by Napoleon in 1806. Scharnhorst aimed to improve military leadership by introducing a permanent general staff, deeply interwoven with the reorganization of the military educational system in Prussia. In a second step, the monograph depicts the career path of Field Marshal Helmuth Graf von Moltke (the Elder) who experienced selection, education, and training in the according to Scharnhorst’s proposals reformed Prussian Army. The third part of this monograph focuses on Moltke’s personal leadership within the Prussian Royal Headquarters, and on his operational planning and command principles during the Franco-Prussian War in 1870-1871. This section also draws parallels between Moltke’s example and modern armed forces, represented by the German *Bundeswehr*.

The monograph concludes that Moltke provided a blueprint for mastering the complexity of military affairs through high quality and effective leadership linked with the German general staff system. For the *Bundeswehr* this blueprint is essential in order to face today’s operational challenges and to increase the attractiveness of military service through high quality leadership.

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Introduction

In the early days of August 1870, during the Prussian advance on France, two different command and control philosophies clashed. The two protagonists were the Chief of the Prussian Army, Field-Marshal Helmuth von Moltke (also called Moltke the Elder) and the Commander of the First Prussian Army, General Karl Friedrich von Steinmetz, a hero of the Battle of Königgrätz in 1866 with a strong ego. Moltke had originally planned an encircling movement by attacking the French forces at the Saar River with the Second Prussian Army in the front, the First Prussian Army on the French left, and the Third Prussian Army on its right flank. Questioning Moltke's planning and hungry for a fight, Steinmetz took the initiative in his own hands. On 5 August 1870 he changed the objectives of his corps and ordered the direct attack against the French forces at Spichern. As a result, Steinmetz blocked the approaching main effort Second Army and found his relatively small First Army in a blind frontal attack against numerically superior French forces. With his insubordination, Steinmetz brought the Prussian campaign against France in its early stage close to failure.¹

This clash in leadership philosophy 140 years ago is important today as the *Bundeswehr* (Federal Armed Forces of Germany) is on the eve of fundamental reform. As one result of a strict austerity plan, the German government decided to cut the military budget significantly. Against this background, the German Federal Minister of Defence established an expert commission to identify options for transforming the *Bundeswehr* to a more cost-efficient and more mission-oriented force. In autumn 2010, the commission officially presented the results of its work in Berlin. The experts suggested a radical restructuring of the *Bundeswehr*, including the suspension of conscription, the downgrade of the troop strength by approximately twenty-five per cent, the

¹ Steinmetz's attack opened the Battle of Spicheren on 6 August 1870. Michael Howard, *The Franco-Prussian War: The German Invasion of France, 1870-1871* (London: Routledge, 1961), 83-85. Geoffrey Wawro, *The Franco-Prussian War: The German Conquest of France in 1870-1871* (Cambridge: Cambridge University Press, 2003), 107-120.

trimming of the military command structure, and the cut of the Ministry of Defence itself by more than half.² The most far-reaching suggestion, to suspend conscription, has already passed German parliament and becomes effective on 1 July 2011. The other recommendations of the expert commission are currently under reconsideration. A steering committee within the Ministry of Defence was tasked to develop a master plan harmonizing the reorganization of the *Bundeswehr* with security policy and budgetary constraints as basis for further political debate. Notwithstanding remaining political decisions, the change of the *Bundeswehr* to an all-volunteer force opens a new chapter in Germany's post-war identity.

The future of a professional *Bundeswehr* is not merely a question of financial resources, organization, or troop strength; it is also a question of leadership culture and military effectiveness in an increasingly complex operational environment. What should drive the leadership philosophy of the *Bundeswehr* in the 21st century – a Prussian-German general staff system represented by Moltke, or a more commander centric command and control represented by Steinmetz? A look at German military history can help to find an answer to this question.

The tradition of the *Bundeswehr* goes back to General Gerhard von Scharnhorst who was the intellectual and political leader of a group of reformers that reorganized the Prussian Army in the years between 1807 and 1813 after its disastrous defeat by Napoleon at Jena and Auerstedt in October 1806. A cornerstone of Scharnhorst's comprehensive programme of reform was the introduction of a permanent general staff, deeply interwoven with the reorganization of the military educational system in Prussia. Scharnhorst's spirit had direct influence on his early pupil

² The commission's report with the translated title "Thinking from the Mission; Concentration, Flexibility, Efficiency" was officially presented in Berlin on 26 October 2010. Strukturkommission der Bundeswehr, *Bericht der Strukturkommission der Bundeswehr: Vom Einsatz her Denken; Konzentration, Flexibilität, Effizienz* (Berlin: 2010).

and later active member in the group of reformers, Carl von Clausewitz.³ This spirit found its expression in Clausewitz's most notable work *Vom Kriege* (On War).⁴

While Clausewitz provided the "intellectual legacy of the Prussian reform era," a third famous Prussian general, Helmuth von Moltke, gave Scharnhorst's and Clausewitz's ideas "practical effect."⁵ Moltke was the first Chief of the Prussian General Staff who was selected, educated and trained based on Scharnhorst's reforms. At the top of the Prussian Army, Moltke became the military architect of German unification. His victorious military campaigns against Denmark (1864), Austria (1866) and France (1870-71) culminated in the proclamation of King William of Prussia as Emperor of the German Empire in Versailles on 18 January 1871. Thus, Moltke provides an excellent example to analyze the positive effects of Scharnhorst's comprehensive military reform on leadership development and military effectiveness. But what formed Moltke's character and mind? What were the milestones in his brilliant career? How did Moltke face the complexity of warfare? How did he define leadership, leadership development, and high quality operational planning?

The thesis of this monograph is that core elements of the Prussian military reforms facilitated the later success of the Prussian Army in the German Wars of Unification and possess enduring relevance for the *Bundeswehr* and other modern armed forces. The methodology to prove this thesis focuses on Moltke, analyzing key factors for his successful leadership as Chief

³ Clausewitz considered his mentor Scharnhorst "the father of my spirit." Marie von Clausewitz, "Erinnerung an den General Clauswitz und sein Verhältniß zu Scharnhorst," quoted in: Charles Edward White. *The Enlightened Soldier: Scharnhorst and the Militärische Gesellschaft in Berlin, 1801-1805* (Westport, Connecticut: Praeger Publishers, 1989), 101.

⁴ Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984).

⁵ Martin Rink and Marcus von Salisch, "Zum Wandel in deutschen Streitkräften von den preußischen Heeresreformen bis zur Transformation der Bundeswehr," in *Reform Reorganisation Transformation: Zum Wandel in deutschen Streitkräften von den preußischen Heeresreformen bis zur Transformation der Bundeswehr*, ed. Karl-Heinz Lutz, Martin Rink and Marcus von Salisch (München: Oldenbourg Wissenschaftsverlag, 2010), 15. Michael Howard, "The Influence of Clausewitz," in Clausewitz, *On War*, 30.

of Staff of the Army in the Franco-Prussian War of 1870-71, and consequently, derives principles of enduring relevance for the *Bundeswehr*. In doing so, this paper aims to support the ongoing reform process in the *Bundeswehr* by providing scope for reflection on traditional German military organization, education, and thinking.

Four distinct perspectives characterize the following analysis. The first section provides the basis for the theoretical understanding of Scharnhorst's general staff system. This section abstracts a thesis the author wrote at the Canadian Forces College in 2003.⁶ The second section focuses on Moltke and the influence Scharnhorst's general staff system had on his mind and work. Section three explores Moltke's role as Chief of Staff of the Prussian Army and the principles for his success in preparation of and during the Franco-Prussian War. The comparison of Moltke's principles with the ones accepted by today's *Bundeswehr* exemplifies their lasting qualities. The final section then answers the question of whether the German general staff system is still adequate to master the challenges of the 21st century.

Scharnhorst – the father of the Prussian general staff system

General Gerhard von Scharnhorst, a Hanoverian by birth, was commissioned in the Hanoverian Army as an artillery officer and transferred to Prussian service on 12 May 1801. While in Hanover, Scharnhorst established a reputation as an educator, military writer and reformer.⁷ Inspired by his personal war experience against revolutionary France in 1792 to 1794, Scharnhorst systematically and thoroughly analyzed the basic reasons for the French success in

⁶ Michael Schoy, *General Gerhard von Scharnhorst: Mentor of Clausewitz and Father of the Prussian-German General Staff* (Toronto: Canadian Forces College, 2003).

⁷ The main Scharnhorst biographies are: Rudolf Stadelmann, *Scharnhorst: Schicksal und Geistige Welt* (Wiesbaden: Limes Verlag, 1952); Reinhard Höhn, *Scharnhorsts Vermächtnis* (Bonn: Athenäum Verlag, 1952); Siegfried Fiedler, *Scharnhorst: Geist und Tat* (1958); Klaus Hornung, *Scharnhorst: Soldat-Reformer-Staatsmann* (Esslingen: Bechtle Verlag, 1997). All contain valuable documents relating to Scharnhorst, his life, and his work. These sources are complemented by the most comprehensive English work: Charles Edward White, *The Enlightened Soldier: Scharnhorst and the Militärische Gesellschaft in Berlin, 1801-1805* (Westport, Connecticut: Praeger Publishers, 1989).

the Revolutionary Wars.⁸ Based on this analysis he developed a concept how to reform the Hanoverian Army in order to catch up with the French.⁹

Soon after Scharnhorst had settled in Berlin he continued to strive for military reforms based on the same concept he had advocated in Hanover. But as in Hanover, there were strong objections to his plans. At that time many senior officers in the Prussian Army “had been subalterns during the wars of Frederick the Great, and they combined a veneration for Frederickian methods with a stubborn reluctance to admit that the practice of warfare may change.”¹⁰ These officers actually doubted whether the success of the French was significant enough to re-examine Frederick’s principles, or as Queen Louise had written, the Prussian military (and with it the Prussian state) “had fallen asleep on Frederick’s laurels.”¹¹ Lieutenant General Ernst Friedrich von Rüchel illustrated this arrogant confidence with his habit of saying “that the Prussian Army possessed several generals of the quality of ‘Herrn von Bonaparte’.”¹²

⁸ Scharnhorst summarized his notions in his essay “Entwicklung der allgemeinen Ursachen des Glücks der Franzosen in dem Revolutionskriege, und insbesondere in den Feldzügen von 1794”, which he and his friend Friedrich von der Decken published in the *Neues Militärisches Journal* in 1797. This essay is edited in: Ursula von Gersdorff, ed., *Gerhard von Scharnhorst: Ausgewählte Schriften* (Osnabrück: Biblio Verlag, 1983), 47-110. In this essay, Scharnhorst first described the superior changes in tactics introduced by the French. Second, he recognized the power of the French nation-in-arms, being able to mobilize “all available resources of the nation.” And third, he delineated the superior effectiveness of French military education and organization, where advancement was based on qualification and merit and not on lineage and social status like in Hanover.

⁹ A brief summary of Scharnhorst’ reform proposals in Hanover may be found in: Peter Paret, *Clausewitz and the State* (Princeton: Princeton University Press, 1976), 65. According to Paret, “He [Scharnhorst] advocated better education for officers and noncommissioned Officers, promotion to the rank of lieutenant by examination, the abolition of nepotism and favoritism, a more equitable and sensible application of military justice, expansion and reequipment of the artillery, Transformation of infantry tactics from the linear system to a combination of attack columns, line and skirmishers, institution of a permanent general staff, reorganization of the army into divisions of all arms to ensure flexibility and operational independence, realistic and intensified training, and finally the diminution of the mercenary character of the army by the introduction of conscription.”

¹⁰ Gordon A. Craig, *The Politics of the Prussian Army 1640-1945* (Oxford: Clarendon Press, 1955), 26.

¹¹ Queen Louise of Prussia in a letter to her father in 1808, quoted in: Ralph Thiele, *Jena-Auerstedt 1806: Die Schlacht und ihr Vermächtnis* (Frankfurt/Main: Report Verlag, 1996), 49.

¹² Walter Görlitz, *Geschichte des deutschen Generalstabes von 1650-1945* (Augsburg: Weltbild Verlag, 1997) 27.

Against this background, it is not surprising why these conservative, predominantly noble traditionalists were unresponsive to innovation, especially when proposed by a Hanoverian peasant's son. The Prussian military leadership was well aware that each of Scharnhorst's proposals "denied the continued validity of a particular aspect of the Frederician system, and each was potentially damaging to special interests."¹³ Scharnhorst clearly recognized that for the time being the Prussian military was beyond comprehensive reform; therefore, he adopted an indirect approach. He decided to focus on the younger generation of officers in order to improve the very low educational standard throughout the Prussian officer corps.¹⁴

"One has always recognized," wrote Scharnhorst, "that most families select their most incompetent sons to become officers."¹⁵ Scharnhorst believed that "ignorance is degrading and dishonoring the military, and often the entire state."¹⁶ For him the profession of arms was an "extraordinarily complex intellectual skill, requiring comprehensive study and training." Through a thorough scientific education, the officer would develop "insight" and "understanding" for the reforms necessary in order to cope with the challenges in the wake of the new war paradigm. Subsequently, the officer would become a "thinking officer," pushing progress in the army on his own initiative.¹⁷ This group of educated officers would create an important "centre of power" for the

¹³ Paret, *Clausewitz and the State*, 66.

¹⁴ Scharnhorst to Lieutenant General von Geusau, 16 August 1802, Acta, Heeresarchiv Potsdam, Nachlass Geusau, Nr. 16; quoted in: Höhn, *Scharnhorsts Vermächtnis*, 130.

¹⁵ Scharnhorst, "Über die Bildung der Offiziere und Unteroffiziere"; ed. in: Reinhard Höhn, *Scharnhorsts Vermächtnis*, 110.

¹⁶ Scharnhorst wrote an article about the degrading ignorance of the military in the first volume of the *Militär Bibliothek*, 1782. This statement is quoted in: Stadelmann, *Scharnhorst*, 150.

¹⁷ Höhn, *Scharnhorsts Vermächtnis*, 106-107.

Prussian monarchy. “Men with insight,” as Scharnhorst called them, trained in military command, were ready to “rise themselves up, if the state was in difficulties.”¹⁸

Consequently, during his early years in Prussia, two institutions became decisive cornerstones in Scharnhorst’s educational concept: the *Akademie für junge Offiziere* (Academy for Young Officers) and the *Militärische Gesellschaft* (Military Society) both located in Berlin. Within three years, beginning in September 1801, Scharnhorst transformed the *Akademie für junge Offiziere* from an insignificant military school into a military academy of national importance. There, he was able to gather and educate those young men, who later, among others, became the designers of the Prussian Army reform, including Carl von Clausewitz.¹⁹

The second cornerstone, the *Militärische Gesellschaft*, was according to the historian Reinhard Höhn, “one of the genius creations of Scharnhorst’s mind.”²⁰ Under Scharnhorst’s direction, the *Militärische Gesellschaft* provided an intellectual platform, where the advocates for innovation and reform could discuss their notions in an academic atmosphere during periodical meetings. The reputation of the society attracted officers

¹⁸ Scharnhorst, “Ohne Bildung der Offiziere in der Kriegskunst kann der Staat keine gute Ausführung von seinen Armeen erwarten”; quoted in: Höhn, *Scharnhorsts Vermächtnis*, 131.

¹⁹ Other examples were the officers Karl Ludwig von Tiedemann, Ludwig Wilhelm von Boyen, and Otto August Rühle von Lilienstern. A comprehensive source for more information on this topic is: Stadelmann, *Scharnhorst: Schicksal und Geistige Welt*. The original name of the “Akademie für junge Offiziere” was “Lehr-Anstalt für junge Infanterie- und Kavallerie-Offiziere” (Institute for Young Infantry and Cavalry Officers). Scharnhorst was appointed its director in September 1801. He transformed the institute in an effective academy to educate parts of the young generation of Prussian officers. This process culminated in 1804 when Scharnhorst wrote a comprehensive constitution dealing with the details of the then called “Akademie für junge Offiziere.” The title of the academy’s constitution is “Verfassung und Lehrinrichtung der Akademie für junge Offiziere, und des Instituts für die Berlinische Inspection.” It is edited in: Fiedler, *Scharnhorst*, 192-209.

²⁰ Höhn, *Scharnhorsts Vermächtnis*, 147.

from all ranks as well as civilians, among whom the then Minister of Finance, Reichsfreiherr Friedrich Karl von und zum Stein, was the most prominent.²¹

In 1805 the *Militärische Gesellschaft* had almost two hundred associates, including two princes of the royal house. On the other hand, nearly half of the officers were captains and lieutenants, including most of Scharnhorst's students at the *Akademie für junge Offiziere*. The majority of the officer membership became generals, including Scharnhorst, August Neidhardt von Gneisenau, Karl Wilhelm von Grolmann, Lilienstern, and Friedrich Karl Freiherr von Müffling who later served as Chief of the Prussian General Staff.²² Consequently, with the *Militärische Gesellschaft* in combination with the *Akademie für junge Offiziere*, Scharnhorst had formed two instruments to enhance the intellectual level of the Prussian officer corps. Furthermore, he had established a personnel network that became a decisive factor for future reform. However, it was not until the Prussian disaster at Jena and Auerstedt for King Frederick William III to be sufficiently concerned about the preservation of his dynasty and to initiate thorough civilian and military reforms.²³

Immediately after the Peace of Tilsit (9 July 1807), Frederick William III appointed Scharnhorst chairman of the *Militär-Reorganisations-Kommission* (Military Reorganization Commission). Scharnhorst brought men he trusted with him into office.

²¹ Höhn, *Scharnhorsts Vermächtnis*, 154.

²² White, *The Enlightened Soldier*, 49. All members of the "Militärische Gesellschaft" are listed in White, 203-11. Moreover, this source gives an excellent overview of the "Militärische Gesellschaft."

²³ In the so-called Ortelsburg Publicandum of 1 December 1806 (only six weeks after Jena and Auerstedt) and in later memoranda, Frederick William III outlined ideas that basically coincided with Scharnhorst's views. This illustrates that the king recognized most of the severe defects of the traditional administrative and military institutions as clearly as did the reformers. However, he never developed his own concept and acted only after the defeat of the Prussian Army at Jena and Auerstedt. Friedrich Meinecke, *The Age of German Liberation, 1795-1815*, trans. Peter Paret and Helmuth Fischer (Berkeley: California University Press, 1977), 93.

Most of these men had been his students at the *Akademie für junge Offiziere* or members of the *Militärische Gesellschaft*. All had proven themselves under fire.²⁴ Finally, when Freiherr vom Stein, who was Scharnhorst's counterpart in the civil administration, joined the commission the link between civilian and military reformers was established. Not all of the various proposals the reformers made were implemented. Strong objections came from both Napoleon and the Prussian traditionalists, including the King.²⁵ However, Scharnhorst used the momentum gained from the recent memory of Jena and Auerstedt to complete the plans for the reorganization of the Prussian Army within two years.²⁶ With regard to the scope of this monograph two essential elements of his reform concept require closer examination – professional military education and its link to a sound organization.

In the winter of 1807-08, Scharnhorst presented his proposals for the reorganization of the general-quartermaster staff and the establishment of a permanent Prussian general staff to the King.²⁷ “A well instructed, theoretically and practically educated and trained general staff,” he wrote, had become “for the army of every modern

²⁴ Paret, *Clausewitz and the State*, 141.

²⁵ Max Lehmann's book *Scharnhorst*, vol. 2 (Leipzig: Hirzel Verlag, 1887) gives detailed insight into the conflict between Scharnhorst, the reformers and the traditionalists in Prussia after the Peace of Tilsit. Napoleon was suspicious towards the reformers' tendency to support a German uprising. Consequently, he demised Freiherr vom Stein on 24 November 1808. King Frederick William III, despite the fact he recognized the need for reforms, was also concerned that revolutionary tendencies in Prussia could endanger his dynasty. Finally, aristocratic conservatives like Count Carl von Lottum, a close advisor of the King, were concerned of losing their traditional privileges. See also: Walter Görlitz, *History of the German General Staff, 1657-1945*, trans. Brian Battershaw (New York: Praeger Publishers, 1959), 34-36.

²⁶ A comprehensive description of the Prussian reformers and the reforms can be found in: Meinecke, *The Age of German Liberation*, 44-101.

²⁷ The original title of the memoranda is: “Vorschläge zur künftigen Einrichtung des Generalquartiermeisterstabes der preußischen Armee,” quoted in: Heinz Stübig, *Scharnhorst: Die Reform des preußischen Heeres* (Göttingen: Muster-Schmidt Verlag, 1988), 47.

power an unavoidable essential need.”²⁸ Scharnhorst’s general staff system comprised three principal and interrelated elements: the reorganization of the Prussian command structure, identification and selection of talented young officers, and the training and education of these men to be general staff officers.

Reorganization of the Prussian command structure was initiated with the cabinet order for “Establishment of the General War Department” on 25 December 1808. The following year, on 1 March, the Ministry of War was created as one of five new ministries to centralize the activities of war. The Ministry of War was organized into two principal departments – the General War Department, and the Economic Department, which dealt with administrative and budget matters. The General War Department was divided into three so called “divisions,” all headed by former members of the *Militär-Reorganisations-Kommission*. The Second Division formed the general staff.²⁹ For Scharnhorst, the general staff would become the focal point for collective knowledge and astuteness. In other words, it was meant to be the primary consulting instrument for the King as commander in chief and not the general-adjutant, who “used to be an infantry officer without higher knowledge.”³⁰

Complementary to the general staff within the Ministry of War, Scharnhorst introduced a *Truppengeneralstab* (tactical general staff) in order to enhance the quality of

²⁸ Quoted in: Hornung, *Scharnhorst*, 196.

²⁹ Scharnhorst, “Vergleichung der ehemaligen Geschäftsführung der militärischen Oberbehörden mit der jetzigen,” edited in: Gersdorff, ed., *Gerhard von Scharnhorst*, 297-309. The First Division, headed by Karl von Grolmann, carried out the main functions of the old general adjutant’s office and reported to the King on personnel matters. The Second Division, under Hermann von Boyen, formed the general staff, while the former general-quartermaster staff was abolished. The Third Division, placed under Count Neidhardt von Gneisenau, was the artillery and engineer division dealing also with procurement matters.

³⁰ Scharnhorst, “Vergleichung der ehemaligen Geschäftsführung der militärischen Oberbehörden mit der jetzigen,” in: Ursula von Gersdorff, ed., *Gerhard von Scharnhorst*, 297.

leadership at the tactical echelon of command.³¹ Scharnhorst recognized that it would be a hopeless undertaking to remove all “ignorant generals, whose understanding of strategy and tactics was not beyond the knowledge of a subaltern officer.”³² Their authority and the tradition supporting them were too powerful. Scharnhorst’s solution was to assign highly educated general staff officers to the different headquarters, guiding the commanding generals according to the intentions of the supreme command, and advising them on all matters of the science of war. With this notion, the general staff as the “brain of an army” was born, and the role of the general staff officers was raised from a purely administrative one to an assistant commander. Thus, the tactical general staff, represented by the chief of staff, became the beneficial corrective for the commander’s lack of talent, where necessary.³³

Scharnhorst recognized that his concept required officers of superior character and intellect. Their identification, selection, training, and education would be essential to achieve his vision. His notions found their way in the *Reglement* (regulations) of 6 August 1808, whereby the *Militär-Reorganisations-Kommission* issued the selection criteria for officers. This law was a revolution in selecting the army’s leadership. Its focus on knowledge, examination, and education broke down the aristocratic exclusivity of the Prussian officer corps. It reformed the practice of automatic promotion according to

³¹ Walter Görlitz, for example, translated the original German term “Truppengeneralstab” with “Operational General Staff” (Görlitz, *History of the German General Staff*, 34). However, this term could cause confusion with the term “operational level of war.” The “Truppengeneralstab” describes general staff appointments on the tactical level of command - army corps, corps, divisions and brigades. Therefore, in this paper the translation “Tactical General Staff” will be used.

³² Scharnhorst, “Über den Nutzen für die Armee, daß den Offizieren ein Unterricht in der Kriegskunst mitgetheilt würde;” quoted in: Höhn, *Scharnhorsts Vermächtnis*, 312.

³³ The role of a chief of staff in a tactical general staff (corps) is described in: Spenser Wilkinson, *The Brain of an Army: A popular account of the German General Staff* (Westminster: Archibald Constable & Co, 1895), 41-42.

seniority and gave scope to talent, qualification, and justified ambition.³⁴ Additionally, it made necessary a thorough reform of Prussia's military educational system.

According to Scharnhorst's plans, military education was more simply and rationally organized into a three-tier structure, under supervision of a single directorate. On the first level were the cadet schools, which prepared aspiring officers for the ensign examination. The second level consisted of three military schools in Berlin, Breslau, and Königsberg, which prepared ensigns for their second examination. At the apex of the educational programme was the *Allgemeine Kriegsschule* (General War School) in Berlin, the later *Kriegsakademie* (War Academy).³⁵

The *Allgemeine Kriegsschule* complemented Scharnhorst's endeavor to improve Prussian military leadership. He had now set the preconditions for selection, training, and education of a professional military elite, and in the general staff, he had created the organizational instrument to bring this intellectual potential to bear. The foundation for the link between a sound military organization and intellect was laid. The most successful example to validate the effectiveness of Scharnhorst's concept, Field Marshal Helmuth Graf von Moltke, just started his military career in Danish service when Prussia began with its transformation.

Moltke - his origin, education, and mind

Helmuth Graf von Moltke was born on 26 October 1800 in Parchim, a town located in today's Mecklenburg-Vorpommern in the northeast of Germany, the third son

³⁴ "Reglement über die Bestzung der Stellen der Portepée-Fähnriche und über die Wahl zum Offizier bei der Infanterie, Kavallerie und Artillerie", quoted in White, *The Enlightened Soldier*, 136-137.

³⁵ The *Allgemeine Kriegsschule* (General War School) was opened in October 1810 and was the precursor of the *Kriegsakademie* (War Academy).

of Friedrich Philipp Victor von Moltke and Henriette Paschen. The Moltke's were a Mecklenburg noble family whose sons served as officials and officers for Denmark, Austria, Russia, Prussia and Württemberg in the 18th and 19th centuries. Moltke's father resigned from the Prussian Army as a prerequisite to marry his wife, the daughter of a Lübeck patrician. However, Friedrich Moltke had no fortune in financial affairs. Therefore, after the assets of Henriette were exhausted, he joined the Danish service where he later became a lieutenant general. Helmuth Moltke always stayed in contact with his family. Numerous letters, predominantly to his mother and siblings, provide revealing information about his way of thinking.³⁶

In 1811, at eleven years old, Moltke and his elder brother Friedrich were sent to the Military Cadet Academy at Copenhagen. At the age of eighteen, he joined a Danish infantry regiment as a lieutenant. However, like Scharnhorst twenty years earlier, the Prussian military exercised a strong attraction on Moltke. After passing an intensive examination, the Prussian Army accepted him on 12 March 1822.³⁷

The following year, Moltke joined the *Allgemeine Kriegsschule* in Berlin, the first milestone in his Prussian career and professional development. Following Scharnhorst's educational concept, the institute educated select officers in a three-year advanced military course in the art of war. For selection, the students had to pass an entrance examination. The classes were limited to fifty officers. The educational goal was to prepare students from all branches for the general staff and for service as adjutants and

³⁶ Eberhard Kessel, *Moltke* (Stuttgart: Koehler Verlag, 1957), 9-19. Moltke had two elder brothers Wilhelm (1798) and Friedrich (1799); three younger brothers Adolph (1804), Ludwig (1805); and Victor (1812); and two sisters Lene (1807) and Auguste (1809).

³⁷ Kessel, *Moltke*, 25.

assistants to senior commanders.³⁸ The curriculum of Moltke's course was a balance of about sixty percent general subjects and forty percent military-specific content.³⁹

In his autobiography, Moltke wrote that the lectures of Major Karl Wilhelm von Canitz on the history of war, Professor Karl Ritter on geography, and Professor Paul Erman on physics were most important to him.⁴⁰ Clausewitz, at that time the director of the *Allgemeine Kriegsschule*, did not lecture himself. Thus, his personal influence on Moltke was limited.⁴¹ However, in the first report at the *Allgemeine Kriegsschule* Clausewitz noted that Moltke had an "impeccable attitude."⁴² Later in his career, Moltke became an avid student of Clausewitz's theory. He named *On War*, after the *Bible* and *Homer*, as one of the truly seminal works which had molded his thinking.⁴³

The second main influence on Moltke's personal and professional development was linked to his strong desire to see foreign countries. In the summer of 1833, this desire was fulfilled for the first time when Moltke travelled four months to Southern Germany, Austria, and Northern Italy. Two years later, Moltke took a six-month leave and traveled to Constantinople. At that time, the Prussian Army had established relations with the Ottoman Army. The Sultan of the Ottoman Empire, Sultan Mahmud II, requested

³⁸ Louis von Scharfenort, *Die königliche Kriegsakademie, 1810-1910: Im dienstlichen Auftrag aus amtlichen Quellen dargestellt* (Berlin: 1910).

³⁹ General subjects were mathematics, physics, chemistry, German literature, and general history. Military-specific content was military history and statistics, gunnery, siege warfare, applied tactics, and general staff duties. Kessel, *Moltke*, 35.

⁴⁰ Helmuth von Moltke, *Die Lebensgeschichte*, vol. 1 of *Gesammelte Schriften und Denkwürdigkeiten des General-Feldmarschalls Grafen Helmuth von Moltke* (Berlin: Ernst Siegfried Mittler und Sohn, 1892), 22.

⁴¹ Kessel, *Moltke*, 1957, 34.

⁴² Moltke, *Die Lebensgeschichte*, 38.

⁴³ Kessel, *Moltke*, 108. In this context, Moltke named also the Austrian astronomer Joseph Johann von Littrow and the German chemist Justus von Liebig.

Prussian staff officers as instructors to help modernize his army. Consequently, Moltke's leave ended in Constantinople and for most of the next four years he served in Turkey as an instructor.

During the Second Turko-Egyptian War (1839), Moltke was a close advisor to Hafiz Pasha, the commander of the Ottoman troops. In the Battle of Nezib on 24 June 1839 between Egypt and the Ottoman Empire, Moltke was in command of the Ottoman artillery. Although the Ottomans lost this battle and Hafiz Pasha sometimes preferred the advice of his astrologer to that of the young Prussian general staff officer, Moltke gained his first experience in combat.⁴⁴ Furthermore, from an educational point of view, Moltke became familiar with the political, military, economic and social conditions in Turkey, with Islam and Islamic culture. His diary, numerous letters, and reports provide detailed information about his impressions during that time.⁴⁵

The third main influence on Moltke was his various appointments as general staff officer between 1833 and 1855 in the *Großer Generalstab* (Central General Staff), the *Truppengeneralstab* (Tactical General Staff), and the higher adjutancy.⁴⁶ In 1833, Moltke transferred to the Central General Staff in Berlin, followed by an appointment to the general staff of the IV Army Corps, first stationed at Berlin and then at Magdeburg, from 1840 until 1845. In these twelve years, Moltke fostered his reputation as an excellent

⁴⁴ Trevor N. Dupuy, *A Genius for War: The German Army and General Staff, 1807-1945* (Englewood Cliffs, New Jersey: Prentice-Hall, 1977), 62.

⁴⁵ All Moltke letters from Turkey in: Freiherr von Schmerfeld, ed., *Feldherr, Geschichts- und Kulturforscher, Feldherr und Philosoph*, vol. 4 of *Generalfeldmarschall Graf von Moltke: Ausgewählte Werke* (Berlin: Verlag von Reimar Hobbing, 1925).

⁴⁶ Literally translated "Großer Generalstab" means Great General Staff. In this paper the term "Central General Staff" is used in order to avoid misconceptions with the adjective "great". The Central General Staff was located in Berlin, was a part of the Ministry of War and, consequently, the highest Prussian military staff. The general staff equivalent on the tactical level of command, as described in footnote 31, is the Tactical General Staff.

academic and military writer.⁴⁷ After the first railways were opened in Germany in 1835 and Prussia in 1838, Moltke invested all of his savings in the planned Hamburg-Berlin railroad. In 1841, he joined the board of directors of this new venture. Thus, Moltke's initial interest in railroads was an economic and technical one.⁴⁸ Later, he recognized the military potential of the new means of transportation and his notions to use railroads for the rapid mobilization and deployment would revolutionize warfare.

In 1845, Moltke was appointed adjutant to Prince Henry of Prussia in Rome. He also used that time to study Roman antiquities and to make a map of Rome and the Campagna.⁴⁹ When Prince Henry died in July 1846, Moltke was ordered back to Prussia. First, he was appointed to the general staff of the VIII Army Corps in Koblenz. When in 1848 the revolution in France spread to Germany, the Chief of the Central General Staff, General Karl von Reyher, ordered Moltke back to Berlin and to the Central General Staff. However, only three months later Moltke received an appointment as Chief of the General Staff of the IV Army Corps in Magdeburg, where he remained for most of the next seven years.⁵⁰

⁴⁷ An example of Moltke's prolific writing is his letters from Turkey that he published in the book: Helmuth von Moltke, *Briefe über Zustände und Gegebenheiten in der Türkei aus den Jahren 1835 bis 1839*, 6th ed. (Berlin: Ernst Siegfried Mittler und Sohn, 1893).

⁴⁸ Moltke describes his railway investment in a letter to his bride on 12 June 1841. The letter is published in: Helmuth von Moltke, *Moltke in seinen Briefen. Mit einem Lebens- und Charakterbilde des Verewigten* (Berlin: Ernst Siegfried Mittler und Sohn, 1892), 170-72. In 1843, Moltke published an article entitled "Welche Rücksichten kommen bei der Wahl der Richtung von Eisenbahnen in Betracht?" (Considerations in the Choice of Railway Routes) in the quarterly "Deutsche Vierteljahresschrift." This article revealed his focus on technical and economic details. An English translation of Moltke's article in: Charles Flint McClumpha, Major C. Barter and Mary Herms, trans., *Essays, Speeches, and Memoirs of Field-Marshal Count Helmuth von Moltke*, vol. 1 (New York: Harper and Brothers, 1893), 227-63.

⁴⁹ Moltke describes his studies and topographical work in Rome in a letter to his brother Ludwig on 2 April 1846. Clara Bell and Henry W. Fischer, trans., *Letters of Field-Marshal Count Helmuth von Moltke* (New York: Harper and Brothers, 1892), 260-65.

⁵⁰ Kessel, *Moltke*, 195.

After Moltke served as Prince Henry's adjutant in Rome, King Frederick William IV followed his career.⁵¹ In 1855, the King made Moltke aide-de-camp to his twenty-four year old nephew Prince Frederick William, who later became Emperor Frederick III. In the King's view, Moltke was the perfect character to educate the young heir apparent in military affairs. Moltke benefited from his new task, although such an assignment was unusual for an officer in the rank of a major general. The travelling with the prince to England, France and Russia further broadened his mind.⁵²

In 1857, two incidents brought an unexpected turn for Moltke — General von Reyher died and King Frederick William IV became seriously ill. The King's regent, Prince William, had had many opportunities to observe and talk to his son's aide-de camp and mentor during the past two years. This close personal relationship and the prince's respect and recognition of Moltke's achievements were very likely the decisive factors for Prince William's decision to appoint Moltke acting chief of staff.⁵³ One year later, after the successful close of a corps maneuver on 18 September 1858, Moltke was officially appointed Chief of Staff of the Army by King's order.⁵⁴

⁵¹ King Frederick William IV was very pleased by Moltke's work as cartographer of Rome and financed the publication of the map on recommendation from Alexander von Humboldt. Kessel, *Moltke*, 185.

⁵² Kessel, *Moltke*, 210-224.

⁵³ Kessel, *Moltke*, 221-224. Moltke expressed his surprise by his appointment in a letter to his wife, dated with Saturday evening. Edited in: Helmuth von Moltke, *Briefe an seine Braut und Frau und andere Anverwandte*, vol. 2 (Stuttgart: Deutsche Verlags Anstalt, 1891), 90. In fact Moltke had never commanded a battalion or regiment and he was the youngest major general in the Prussian Army. However, with the King's adjutant, Leopold von Gerlach, Moltke had a powerful advocate. Gerlach qualified Moltke to be the best for the post as Chief of Staff (Kessel, *Moltke*, 222).

⁵⁴ Moltke's appointment as Chief of Staff of the Prussian Army came with a blue (the royal colours) letter signed by the King's representative, Prince William. Quoted in: Lieut.-Colonel F. E. Whitton, *Moltke*, ed. Basil Williams (London: Constable and Company, 1921), 68.

In summary, there are several points concerning Moltke's life and his career in Prussian service that highlight the consistent value of Scharnhorst's educational reform concept. The first point is related to the aspects attractiveness, selection, and education. Obviously, the reformed Prussian Army was highly attractive for talented young men like Moltke, who changed from Danish to Prussian service for better career opportunities. However, before Moltke was accepted for Prussian service he had to pass an intensive examination. The opportunity to join the *Allgemeine Kriegsschule*, the top Prussian military education institute, was the result of further selection. This institute gave Moltke a sound military and general education, and perfectly prepared him for future general staff appointments.

Second, beside all personal talent, traits, and education, the experience gained in different appointments in the Central and Tactical General Staff, the higher adjutancy, and abroad intensively formed Moltke's character and leadership abilities. In Turkey, he gained his first combat experience. In the general staffs in Berlin, Koblenz, and Magdeburg, he learned to appreciate the value of reconnaissance and exploration field trips, staff rides, maneuvers and *Kriegsspiele* (war games) for peacetime training.⁵⁵ There he found the platform to demonstrate his tactical proficiency and to establish a personal network.⁵⁶ Moltke early recognized the potential of railroads for military use. Finally, Moltke developed his judgment on strategic connections and their relationship with national interests as aide-de-camp to the Prussian prince, and he was able to distinguish

⁵⁵ Kessel, *Moltke*, 100-03. According to Kessel, for example, the members of the Central General Staff spent several weeks a year outside Berlin, travelling, planning and exercising within their areas of responsibility. Details of training are also described in: Görlitz, *History of the German General Staff*, 53-4.

⁵⁶ Kessel, *Moltke*, 206-208.

himself under close examination of the monarch. All this left an imprint on Moltke for the rest of his life and aided his further advancement as well as his later role as first military advisor to the King. The only factor left was to prove Moltke's superior leadership in combat, and this would follow in the Wars of German Unification.

Moltke – out of-date or still modern?

The Prussian general staff system and Moltke's understanding of his role as chief of staff reveal significant parallels with the organization and leadership culture in the *Bundeswehr*. The following section describes these parallels and answers critics on Moltke's leadership during the Franco-Prussian War. Both are necessary in order to examine whether Moltke's example is still relevant today.

Moltke and the Prussian general staff

Moltke's Central General Staff in Berlin was one of three organizational elements with strategic responsibilities under the direction of the King. The Ministry of War was primarily responsible for raising, maintaining and administering the army, the Central General Staff focused on training and directing the army in peace and war as well as for developing campaign plans, and the Military Cabinet, controlled the information flow to the King and controlled all officer appointments.⁵⁷

Moltke had a good professional relationship with his two counterparts.⁵⁸ Albrecht von Roon, who became Minister of War in 1859, was also a general. He and Moltke

⁵⁷ Wilkinson, *The Brain of an Army*, 19. Dupuy, *A Genius for War: The German Army and General Staff, 1807-1945* (Englewood Cliffs: Prentice-Hall Incorporation, 1977), 67-8. Ralf Pröve, *Militär, Staat und Gesellschaft im 19. Jahrhundert* (München: Oldenbourg Wissenschaftsverlag, 2006), 31-32.

⁵⁸ Kessel, *Moltke*, 342.

shared a common basis of understanding. Many historians, including Hajo Holborn, called Roon “the most influential figure” in the Prussian Army before 1866.⁵⁹ Roon showed exceptional qualities and had success in pushing comprehensive army reforms against strong resistance from the Prussian parliament. Thus, there was no need for Moltke to get personally involved in the daily business of political struggle.⁶⁰ Rather, he could focus his efforts on enhancing the effectiveness of the Central General Staff.

In the following years, two key events increased the importance of Moltke’s Central General Staff. In 1865, the Director of the Military Cabinet, Major General Hermann von Treschow, persuaded the King that Moltke should attend all discussions of the Ministerial Council whenever General Staff matters were on the agenda.⁶¹ This decision was a novelty and gave Moltke access to the strategic level of command. The second event happened in appreciation of Moltke’s exceptional achievements as military strategist during the war against Austria (1866). On 2 June 1866, King William I declared that in times of war the Chief of Staff of the Army was granted the right to issue operational orders on behalf of the King. The consultation of the sovereign in advance was limited only to “vital decisions.” The Minister of War was no longer part of the military decision making process. The General Staff simply had only to keep him informed him about military activities.⁶² By 1866, Moltke had replaced Minister of War

⁵⁹ Hajo Holborn, “The Prusso-German School: Moltke and the Rise of the General Staff,” in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton: Princeton University Press, 1986), 286.

⁶⁰ For a comprehensive description of the reform of the Prussian Army under Roon and its political implications see: Otto Pflanze, *The Period of Unification, 1815-1871*, vol. 1 of *Bismarck and the Development of Germany* (Princeton: Princeton University Press, 1990), 166-177.

⁶¹ Görlitz, *History of the German General Staff*, 84-85.

⁶² Görlitz, *History of the German General Staff*, 86.

Roon as the most influential person in the Prussian Army. With his new competencies, Moltke was not only the first advisor to the King, he was now the “virtual commander in chief” of the Prussian Army.⁶³ For the first time, the General Staff of the Army was entrusted not only with the planning of operations, but with their execution as well.

A royal order on 31 January 1867 divided the Central General Staff in two main elements, a *Hauptetat* (main establishment) and a *Nebenetat* (supporting establishment). Moltke organized the *Hauptetat* in four divisions. Three divisions followed the traditional outline, keeping track of all matters of military interest within a geographical area of responsibility at home and abroad.⁶⁴ The fourth division worked on matters related to military rail transport. Four departments of the *Nebenetat* complemented the *Hauptetat*: military history, geographical-statistical studies, topographical, and land triangulation.⁶⁵ While Moltke did not introduce revolutionary changes within the Central General Staff, with the creation of a separate military railway division, however, he recognized the increasing importance of railways for the rapid mobilization, transportation and deployment of troops. This organizational detail later played a decisive factor in the successful campaign against France.

The general staff officers in the Prussian Army were few in number. In 1867, out of a total of 109 general staff officers, forty-six served in the Central General Staff and fifty-three in the Tactical General Staff. At the start of the campaign against France in

⁶³ Holborn, “The Prusso-German School: Moltke and the Rise of the General Staff,” 291. The term “virtual commander” was already used by: Whitton, *Moltke*, 69.

⁶⁴ The first division was responsible for Sweden, Norway, Turkey, and Austria. The second division focused on Germany, Italy, and Switzerland. The third division was responsible for France, England, Belgium, the Netherlands, Spain, Portugal, and America.

⁶⁵ Theodore Schwan, *Report on the Organization of the German Army* (Washington: Government Printing Office, 1894), 59.

1870, Prussia had a total of 161 general staff officers. In the mobilized units, these officers served down to the level of division. Moltke's staff within the Royal Field Headquarters comprised only fifteen general staff officers.⁶⁶ This was a relatively small number with regard to the scope of the duties of these officers and the overall German troop strength of 982,000 men.⁶⁷

Moltke took personal care, in close coordination with the Military Cabinet, that the armies and corps headquarters were augmented with general staff officers of whom he could expect best performances. The three army headquarters had the highest priority in order to implement his lines of operation in tactical orders for the corps and divisions they commanded. The professional qualification of the general staff officers was more important to him than his personal relationship with them.⁶⁸

Among the hand-selected general staff officers in the Royal Field Headquarters the three section chiefs operating directly under the Chief of Staff's supervision merit special mention: Lieutenant Colonel Paul Bronsart von Schellendorf heading the operations section, Lieutenant Colonel Julius von Verdy du Vernois directing the intelligence section, and Lieutenant Colonel Karl von Brandenstein operating the railroad

⁶⁶ Paul Bronsart von Schellendorf, *The Duties of the General Staff*, corrected and revised by Colonel Meckel, trans. W. A. H. Hare (London: Harrison and Sons, 1893), 31-35. In detail Moltke's staff was comprised of one quartermaster general, three section chiefs, three field officers, six captains, as well as the commissary general of the army and the director general of military telegraphs. Additionally, Moltke had two adjutants. In the mobilized units up to eight general staff officers served in each of the three army commands, four general staff officers in each of the twelve army corps, and one general staff officer in each of the thirty-five divisions.

⁶⁷ Julius von Verdy du Vernois, *With the Royal Headquarters in 1870-71*, ed. Walter H. James (London: Kegan Paul, Trench, Trübner, 1897), 32. A comprehensive description of the duties of the General Staff, translated in English, in: Schellendorf, *The Duties of the General Staff*.

⁶⁸ Kessel, *Moltke*, 546-547. The Chiefs of Staff were: General Kurt von Sperling, First Army; General Gusav von Stiehle, Second Army; and Leonard Graf Blumenthal, Third Army. According to Kessel, the personal relationship between Moltke and Blumenthal was stressed. But Moltke appreciated Blumenthal's professional performances. An interesting description of the characters holding key positions in the Prussian Army, in: Vernois, *Im Grossen Hauptquartier*, 19-32.

section. The three section chiefs were all thirty-eight when the war against France began and they had been friends since they were cadets at the War School (the later *Kriegsakademie*). At the War School, the three friends attracted Moltke's attention during a war game. Their common professional foundation and high proficiency were of great benefit for the overall efficiency of the staff work. If one was not available, another could jump and seamlessly take over his duties. Owing to their wartime successes these officers were known as Moltke's "demigods" throughout the Prussian Army.⁶⁹

The *Bundeswehr* and its general staff system

The *Bundeswehr* does not have a general staff in the traditional Prussian sense, but it does have officers serving in general staff and admiral staff appointments. This fine delineation is one of the particularities in Germany's postwar identity. The Chief of Staff, *Bundeswehr* (*Generalinspekteur der Bundeswehr*) is the highest-ranking military post in the German Armed Forces. The *Generalinspekteur der Bundeswehr* is the principal military advisor to the Federal Government. He is responsible for the development and implementation of the overarching concept of military defence.⁷⁰ As part of the ongoing reform of the *Bundeswehr* it is planned to transform the *Generalinspekteur* into a Chief of Defence, which would give him command authority over all services and missions. There are plans for a streamlined four-level command structure: Defence Minister, Chief of

⁶⁹ Vernois, *With the Royal Headquarters*, 24-31. The quote "demigod" is from page 30.

⁷⁰ Germany, Federal Ministry of Defence, *White Paper 2006: On German Security Policy and the Future of the Bundeswehr* (Berlin: 2006), 122.

Defence, Chief of *Bundeswehr* Operations Command followed by unit commanders on the ground.⁷¹

General staff officers serve on all four command levels, down to the level of combat maneuver brigade. These brigades today have four general staff officers – a chief of staff, a G2 (enemy estimation), a G3 (planning, operation and training), and a G4 (logistics). From the divisional level of command, general staff officers head all military staff sections in the headquarters. Additionally, general staff and admiral staff officers of the *Bundeswehr* are employed within the United Nations (UN), North Atlantic Treaty Organization (NATO), European Union (EU), as attachés or liaison officers, with troop service, with agencies and schools, as well as with other ministries and science institutes.⁷²

The general staff service of the *Bundeswehr* is regulated by the so-called *Heusinger-Erlass* (Heusinger-Regulation), dating from 8 September 1959.⁷³ The regulation determines that specially earmarked general staff posts must be filled with general staff officers. As a rule, these officers have successfully attended the two-year general staff officer course at the *Führungsakademie der Bundeswehr* (German Armed Forces Command and Staff College; in short *Führungsakademie*) in Hamburg. For a short time, up to twenty percent of the general staff posts can be appointed with officers

⁷¹ Strukturkommission der Bundeswehr, *Bericht der Strukturkommission der Bundeswehr: Vom Einsatz her Denken; Konzentration, Flexibilität, Effizienz* (Berlin: October 2010).

⁷² These details reflect the author's twelve years of experience as an general staff officer in the *Bundeswehr*.

⁷³ General Adolf Heusinger (1897-1982) was the first "Generalinspekteur der Bundeswehr" (Chief of Staff, Bundeswehr), from 1957-1961.

having no general staff education. Officers in a general staff post bear after their rank the designation *im Generalstabsdienst* (in the general staff service), or the abbreviation *i.G.*⁷⁴

In the *Bundeswehr*, the selection process for general staff and admiral staff officers is based on four notable factors. The first is the examination report and ranking after a ten-week joint staff officer course (*Stabsoffizierlehrgang*) at the *Führungsakademie* that must be passed by every career officer at the rank of captain as a prerequisite for promotion to field grade officer. The second is the officer's performance according to his evaluation reports and the recommendation of a superior in the position of a division commander, or equivalent. The third is a selection board prepared and headed by the *Bundeswehr* Personnel Office. This board, under supervision of the Ministry of Defence, considers the character, performance, suitability, and the willingness of the candidate to attend the training. Finally, the recommendations of the "selection board" need the approval of the respective service chief. As a result, approximately twenty percent of an officer year group, or in absolute figures up to forty-seven officers from the army, twenty-five from the air force, fourteen from the navy, and one from the medical service are selected to attend six-month language training and then the two-year general staff and admiral staff courses at the *Führungsakademie* in Hamburg, starting every year in October.⁷⁵

⁷⁴ Germany, Bundesministerium der Verteidigung, Fü B I 1, Az 10-20-12 (Bonn: 8 September 1959).

⁷⁵ For the selection process for the general staff and admiral staff officer training, as well as for the absolute and relative figures see: Germany, Bundesministerium der Verteidigung, PSZ I 1, *Richtlinie für die Auswahl der Berufsoffiziere des Truppendienstes, des Sanitätsdienstes und des Geoinformationsdienstes der Bundeswehr für die Teilnahme am Lehrgang Generalstabsdienst / Admiralstabsdienst (LGAN)*, (Bonn: BMVg, 21 January 2008). Germany, Bundesministerium der Verteidigung, PSZ I, *Personalinformation 2009*, (Bonn: BMVg, 13 November 2009). Germany, Führungsakademie der Bundeswehr, *Lehrplan für den Lehrgang „Generalstabsdienst / Admiralstabsdienst National 2010“ vom 04.10.2010 bis 28.09.2012* (Hamburg: 25 June 2010).

The aim of the general staff and admiral staff course is:

to enable the officer to fulfill tasks in a general staff or admiral staff appointment on the strategic, operational, or tactical level of command, within the full spectrum of tasks of armed forces, in the national and international realm, and taking into account societal developments, economic requirements, and an organizational cross-functional approach, in a critical-reflexive, independently, responsibly, and competent manner.⁷⁶

Against this background, the *Führungsakademie* reveals significant parallels to the program Moltke experienced at the *Kriegsakademie* under Clausewitz's leadership. The academy is the capstone of professional military education and leadership development in the *Bundeswehr*. The main objective of the general staff and admiral staff course is to develop assistant commanders, who according to their character, education, and training are able to understand and analyze complex facts, and who are able to prepare decisions based on different problem analysis methods.⁷⁷ The vast majority of key positions from the strategic level of command down to the tactical level of a maneuver brigade are filled with general staff or admiral staff officers; the commander selection rate among these officers is high. In order to answer the question how to make effective use of the intellect, knowledge, and ambition of these officers it is worth, examining Moltke's example again.

Moltke's leadership during the Franco-Prussian War

No one could testify Moltke's leadership competencies better than the members of his staff. Verdy du Vernois did so in his book *With the Royal Headquarters* reflecting on the Franco-Prussian War. Moltke's superior mind, he wrote, left no room for rivalry,

⁷⁶ Führungsakademie der Bundeswehr, *Lehrplan für den Lehrgang „Generalstabsdienst / Admiralstabsdienst National 2010“ vom 04.10.2010 bis 28.09.2012* (Hamburg: 25 June 2010), 5.

⁷⁷ The statement reflect the personal experiences of the author as syndicate leader and tutor in the general staff and admiral staff courses at the Führungsakademie from 2007 to 2008.

rather it ruled the staff. Verdy du Vernois characterized the spirit and climate in Moltke's staff with a few words:

The spirit which prevails in a headquarters staff is by no means a matter of indifference. Its imperturbability, the absence of any sort of 'croaking,' the self-confidence evident in its whole behaviour, as well as the firm belief in a victorious issue, not only further the work that is done there, but communicate serenity and confidence to all who come in contact with the members of the staff.⁷⁸

In the same tenor the historian Leonce Rousset assessed the superiority of Moltke's leadership from a French perspective:

The principal support of the high command was the General Staff corps, recruited from the best officers of all arms who had successfully completed the War Academy. Its Chief devoted to this Staff a jealous care and constant attention which prepared it without cease or remiss, for the business of war. Moltke directed this service in person, choosing his key officers from an elite from whom the mediocrities were carefully eliminated, assuring him of that fertile impetus which produced such great results in 1870.⁷⁹

But despite all leadership competencies and fortune in manning the general staff, how did Moltke define his role as chief of staff?

Moltke suggested the answer to this question as early as 1862. There are supreme commanders, he wrote in a monograph analyzing the war between France and Austria of 1859, who need no counsel to come to decision, but those are "stars of first magnitude" and rarely found. He continued,

In the great majority of cases the head of an army cannot dispense with advice. This advice may in many cases be the outcome of the deliberations of a small number of men qualified of abilities and experience to be sound judges of the situation. But in this small number, one, and only one opinion must prevail. The organization of the military hierarchy should be such as to ensure subordination even in thought, and give the right and the

⁷⁸ Vernois, *With the Royal Headquarters*, 29.

⁷⁹ Dupuy, *A Genius for War*, 101.

duty of presenting a single opinion for the critical examination of the general-in-chief to one man and only to one.⁸⁰

Verdy du Vernois' and Rousset's depictions in connection with Moltke's considerations give insight into the spirit and climate of the Prussian general staff under Moltke's leadership. Professional competence, a clear vision, the selection and development of the right personnel, the creation of a positive environment, and wartime success were core elements of Moltke's superior leadership. These core elements possess enduring relevance.⁸¹ For Moltke, discourse and deliberation of a small group of qualified men was accepted as long as these methods enhanced the quality of the decision making process. However, only the chief of staff was to focus the planning and present recommendations to the commander. Thus, Moltke laid the foundation for the strong position of the chief of staff in the Prussian-German general staff system.

The chief of staff's and general staff officer's role in the *Bundeswehr*

The strong position of the chief of staff, which Moltke advocated in 1862, has found its way into the today's German Army regulations. Army Regulation (HDv) 200/100, Command and Control System of the Land Forces, for instance, states:

The chief of staff commands the staff and coordinates its work. Chiefs of Staff are the first advisers of the commander and are responsible for the staff's effectiveness to him. They inform the staff about the decisions of the commander. If neither the commander nor his deputy can be reached

⁸⁰ Whitton, *Moltke*, 74.

⁸¹ The U.S. Army Field Manual (FM) 6-22, for instance, lists the described core elements of Moltke's leadership in its Leadership Requirements Model. United States, Headquarters Department of the Army, *FM 6-22: Army Leadership, Competent, Confident, and Agile* (Washington, DC: 12 October 2006), 2-4.

the chief of staff will make the necessary decisions. She or he coordinates the internal and external information exchange relationship of the staff.⁸²

The role of the chief of staff in the German system is a particular one. He is the first advisor to the commander, and ideally serves as an *alter ego*.⁸³ In international environments the role of the chief of staff is often limited to an assistant to the commander, primarily responsible for coordinating the staff work.⁸⁴ A German chief of staff, however, is more than an assistant – he is a partner in command.

In the *Bundeswehr*, like in other armies, general staff officers must relieve their commanders or superiors of all aspects of staff work. According to German opinion, however, their primary task is to advise superiors regardless of the superior's opinion. A general staff officer is fully responsible for the accuracy of the advice he provides. Consequently, a German general staff officer does have a position that distinguishes him from other staff officers. When requested, all staff officers advise superiors. A general staff officer, however, provides advice on all official matters in his official capacity, and if required he urges his commander to make decisions and to take action. Superiors should consult him as a matter of course. A general staff officer is obliged to express his misgivings. He is significantly involved in all phases of the operational planning process. Together with his superior, he analyzes the mission, estimates the situation, and helps develop the commander's decision. Therefore, it is often not ascertainable who provided

⁸² Germany. Bundesministerium der Verteidigung, Inspekteur des Heeres, *Führungssystem der Landstreitkräfte (TF/FüSys): HDv 100/200 VS-NfD* (Bonn: 24 March 2010), Number 409 (trans by the author).

⁸³ Wilkinson, *The Brain of an Army*, 41.

⁸⁴ The U.S. Army Field Manual (FM) 6-22, gives an example of the different definition of the role of a chief of staff, stating in its paragraph 11-42, "By definition, the chief of staff or deputy is the principal assistant for directing, coordinating, supervising, and training the staff except in areas the commander reserves for himself."

what contribution; however, only the commander or prevailing superior is authorized to make decisions.⁸⁵ Thus, general staff officers in the *Bundeswehr* are junior partners in command, following the example Moltke established.

Criticism of Moltke's leadership

Moltke's role as Chief of Staff of the Prussian Army during the Franco-Prussian War is not without criticism, most notably by the British historian J.F.C. Fuller. For Fuller, Moltke was a "supremely great war organizer, who relied on logic rather than opportunity." Fuller's critique is that Moltke, unlike Napoleon I, "brought his armies to their starting points and then abdicated his command and unleashed them." During the campaign, Fuller argued, Moltke merely issued directives stating his intentions, rather than detailed orders. In Fuller's analysis the Prussian victory was the result of the "stupidity of the French," the initiative of the Prussian Army commanders and the superb handling of the Prussian artillery. Thus, Fuller concluded, "Moltke is not a general to copy but to study."⁸⁶ But is this harsh critique appropriate?

Fuller's observations have some validity regarding aspects of Moltke's planning and command. To compare Moltke with Napoleon I, however, does not reflect the different situational framework both faced. The great French strategist served simultaneously as the head of state and as the supreme military commander in the field, whereas Moltke acted as first military advisor to King William I.⁸⁷ Although the war

⁸⁵ Christian Millotat, *Das preußisch-deutsche Generalstabssystem: Wurzeln – Entwicklung – Fortwirken* (Zürich: vdf Hochschulverlag, 2000), 33-34.

⁸⁶ John F. C. Fuller, *From the Seven Days Battle, 1862, To the Battle of Leyte Gulf, 1944*, vol. 3 of *A Military History of the Western World* (New York: Funk & Wagnalls Company, 1956), 134.

⁸⁷ Hans Delbrück, quoted in: Arden Bucholz, *Moltke, Schlieffen and the Prussian War Planning* (Providence: Berg Publishers, 1991), 54-55.

against Austria in 1866 had strengthened Moltke's position, he was still embedded in a framework with the King acting as commander in chief and with princes commanding armies. Furthermore, in the Royal Headquarters a troika drove the strategic decision making process under command of King William I: the Prussian Prime Minister Otto von Bismarck, War Minister Roon, and the Chief of General Staff of the Army Moltke. Among these three men, respectfully called the King's "paladins," Prime Minister Bismarck was a powerful civilian counter balance to the general staff.⁸⁸

During the Siege of Paris (19 September 1870 – 28 January 1871) the tensions between the Prussian civilian and military leadership culminated in an intensive dispute between Bismarck and Moltke. Bismarck advocated shelling Paris in order to ensure the quick French surrender before Britain or Austria entered the war against Prussia. For Moltke, however, the fall of the French capital was only a question of time. He argued that the bombardment of Paris would cause civilian casualties, and consequently, would turn the other powers in Europe against Prussia, without speeding the final victory. Moltke was also worried about the insufficient supplies to sustain a bombardment and the necessity to use the limited resources available against the remaining French field armies. The different political and military assessments were incompatible. To end the dispute, the King decided on 25 January 1871 in favor of Bismarck and ordered Moltke to consult with the Prime Minister for all future operations. Subsequently, Bismarck ordered the shelling of Paris the same day. Three days later, Paris surrendered. On 26 February 1871 the preliminary Treaty of Versailles sealed the defeat of France.⁸⁹

⁸⁸ The nickname "paladins" is quoted in: Vernois, *With the Royal Headquarters*, 19.

⁸⁹ Kessel, *Moltke*, 582-589.

The dispute during the Siege of Paris demonstrated that Moltke's strategic and tactical powers were much more limited than those of the Emperor Napoleon I. In fact, Moltke's experienced what Clausewitz described as the primacy of politics in strategic decision making. This principle has become the foundation for modern civil-military relations. Moltke followed Clausewitz closely stating that the objective of war is to implement the government's policy by force.⁹⁰ But in contrast to the more abstract philosopher Clausewitz, Moltke was a pragmatist who focused on organization, strategic planning, and operational command.⁹¹ When Moltke used the term "strategy" he described a concept that is generally known as "operational art" today.⁹² As Chief of Staff of the Prussian Army he had to translate the political will into military action. In doing so, he placed himself in the center of what in contemporary terms is called the operational level of command.

The political-strategic goal of the war in 1870 was to defeat France with the capture of Paris. Moltke translated this goal into the operational goal to destroy the combat power of the French Army. In his "vision" the French troops were to be attacked and defeated wherever they were found by concentrating numerical superior German forces more rapidly than the enemy.⁹³ "No plan of operations," in Moltke's often

⁹⁰ Schmerfeld, *Feldherr und Kriegslehrmeister*, vol. 1, 32.

⁹¹ Gunther E. Rothenberg, "Moltke, Schlieffen, and the Doctrine of Strategic Envelopment," in *Makers of Modern Strategy: from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton: Princeton University Press, 1986), 297-298.

⁹² According to Peter Paret, Moltke used the term "strategy" close to Clausewitz in a narrow sense as the use of armed force to achieve the military objectives and, by extension, the political purpose of the war. Peter Paret, ed., *Makers of Modern Strategy: from Machiavelli to the Nuclear Age* (Princeton: Princeton University Press, 1986), 3.

⁹³ Helmuth von Moltke, *Geschichte des deutsch-französischen Krieges von 1870-71*, vol. 3 of *Gesammelte Schriften und Denkwürdigkeiten des General-Feldmarschalls Grafen Helmuth von Moltke* (Berlin: Ernst Siegfried Mittler und Sohn, 1891), 8. The contemporary term „vision“ is in defined as the

repeated dictum, “extends with certainty beyond the first encounter with the enemy’s main strength.”⁹⁴ Thus, Moltke did not see a benefit in long-term planning. However, he spent vast energy and diligence in considering everything that could and must be planned in preparation for the war, based on his operational considerations.

In the preparation for the campaign against France, including the elements of mobilization, transport, deployment and approach march, Moltke clearly differentiated between conceptual and detailed planning. Moltke believed, “A mistake in the original concentration of the army can hardly be rectified during the entire course of the campaign.”⁹⁵ To avoid such a mistake he had to make two basic operational decisions: where to assemble the armies and how to execute the approach to first contact with the enemy.⁹⁶ Everything else was a matter of detail and accurately planned by the general staff. The mobilization of the troops, their transport to assembly areas and the possible approach marches were all laid out in precise timetables. The numerous lessons learned in the wake of the mobilizations since 1859 were taken into account and the mobilization plans were harmonized with the Ministry of War once a year. Moltke later remembered, “We were surprised in Germany when the war broke out, but it did not hit us unprepared.”⁹⁷

leader-focused, organizational process that gives the organization its sense of purpose, direction, energy, and identity. United States Army War College, *Strategic Leadership Primer*, 2nd ed. (Carlisle: 2004), 28.

⁹⁴ Moltke in his essay *On Strategy*, written in 1871. In: Daniel J. Hughes, ed., *Moltke on the Art of War: Selected Writings*, trans. Daniel J. Hughes and Harry Bell (New York: Presidio Press, 1993), 45.

⁹⁵ Schmerfeld, *Feldherr und Kriegslehrmeister*, vol. 1, 76.

⁹⁶ Moltke, *Geschichte des deutsch-französischen Krieges von 1870-71*, vol. 3, 8.

⁹⁷ Moltke described the Prussian preparations for the Franco-Prussian War in detail in: Moltke, *Geschichte des deutsch-französischen Krieges von 1870-71*, vol. 3, 2-8. The quote is from page 5. In fact, Moltke was on summer leave when he was informed about the impending war.

According to the Chief of Staff's proposals, the Prussian-German maneuver forces were grouped into three armies: the First Army with 60,000 men under General Karl Friedrich von Steinmetz, the Second Army with 134,000 men under Prince Frederick Charles of Prussia, and the Third Army with 130,000 men under Crown Prince Frederick of Prussia. Only two weeks after the mobilization was ordered (16 July 1870) approximately 300,000 German troops were in their assembly areas at the Rhine or further west. Moltke's operational considerations included where to assemble the German armies and how to approach the French forces. The combination of detailed planning and accurate preparation by the General Staff led to the desired effect. It was the tragedy of the French army that they did not realize in time that military organization and leadership had entered into an entirely new age.⁹⁸ Thus, with regard to the phase of preparation Fuller was right; Moltke proved to be the exceptionally skilled war organizer who relied on logic and calculation.

Moltke's success on the battlefield, however, was more than just calculation. With regard to the uncertainties of war he wrote, "Strategy is a system of ad hoc expedients; it is more than knowledge, it is the application of knowledge to practical life, the development of an original idea in accordance with continually changing circumstances. It is the art of action under the pressure of the most difficult conditions."⁹⁹ In other words, on the battle field, strategy transitions from science to art. Constantly changing

⁹⁸ Michael Howard, *The Franco-Prussian War: The German Invasion of France, 1870-1871* (London, New York: Routledge, 1961), 39.

⁹⁹ Holborn, "The Prusso-German School: Moltke and the Rise of the General Staff," 290. Moltke's term "strategy" includes operational and even tactical planning.

circumstances ask for individual solutions developed by highly educated and trained officers with an independent judgment.

In 1870, the Prussian Army had a well trained and capable officer corps. The army, corps, and division commanders had already proven themselves in the war against Austria. General staff officers, Moltke trusted, held key positions in the armies and corps headquarters. Nevertheless, one crucial question still remained: How to coordinate the alteration of maneuver and concentration of three large armies, on a dispersed battlefield, and with limited means of communication?

The answer to this question was a system of centralized control and decentralized command most clearly explained in Moltke's "Instructions for Large Unit Commanders."¹⁰⁰ In these instructions, Moltke stated that victorious battles alone "break the will of the enemy." Therefore, the destruction of the enemy's fighting power is the foremost objective in operations. Moltke believed that, "the strength of the army rests in the platoon leader at the front and in the captain, upon whom all eyes are directed." This strength on the tactical level of command, nevertheless, "must be guided by the intelligence of commanders," who bear the responsibility of their decisions, often made under difficult circumstances. Supreme commanders, however, frequently lack situational awareness, and consequently, must allow their subordinate commanders considerable independence to exercise their own judgment. Thus, Moltke's concept to delegate responsibilities to lower levels of command is more nuanced than Fuller's critique that Moltke just "brought his armies to their starting points, then abdicated his command and

¹⁰⁰ The instruction's German title is "Verordnungen für die höheren Truppenführer vom 24. Juni 1869". An English translation is edited in: Hughes, *Moltke on the Art of War*, 171-224.

unleashed them.” Rather, Moltke’s thoughts built the foundation for the German doctrinal concept of *Auftragstaktik* (mission command).

The Prussian command and control system during the war against France was, as Fuller recognized, not without flaws. Moltke used to communicate his intent in short directives, following the maxim, “to order no more than is absolutely necessary and to avoid planning beyond the situation one can foresee.” “The higher the authority,” he wrote, “the shorter and more general will the orders be.”¹⁰¹ Moltke believed that similar educated general staff officers applying his “Instructions for Large Unit Commanders” would turn sound conceptual guidance into executable detailed plans. Such a system requires both the precise communication of a high command’s overall intent as well as commanders who exercise initiative in a flexible and disciplined manner within this framework.

The introductory example of General von Steinmetz illustrates that some Prussian commanders broke the frame of unity of effort and discipline. Moltke generally was broad-minded when a commander’s initiative was not exactly according to his intent. Sometimes he amplified his directions with detailed orders. Under time pressure he even tasked corps directly and informed the superior army headquarters afterwards.¹⁰² In critical situations, however, Moltke preferred to send one of his “demigods” to explain his intent in person.¹⁰³ In the case of General von Steinmetz, however, all efforts were without effect. It needed the authority of the king to solve this particular problem. Two

¹⁰¹ Hughes, *Moltke on the Art of War*, 184-185.

¹⁰² Schmerfeld, *Feldherr und Kriegslehrmeister*, vol. 1, 67-68.

¹⁰³ Examples for sending Lieutenant Colonel von Verdy du Vernois or Lieutenant Colonel von Brandenstein to the Headquarters of First and Second Army to communicate Moltke’s intent in: Schmerfeld, *Feldherr und Kriegslehrmeister*, vol. 1, 66-67. Kessel, *Moltke*, 549, 554.

weeks after the Battle of Spichern, Steinmetz was appointed governor-general back in the Provinces of Silesia and Posen.¹⁰⁴

In summary, Fuller's critique of Moltke is lacking thorough analysis in detail. Moltke was an absolute pragmatist in both organization and planning. He had a clear understanding of what could and could not be achieved within the existing political and military structures in Prussia. Moltke recognized the need for an operational level of command to link political strategy with tactical action on the battlefield and established a powerful Central General Staff in that position. He adapted and refined the general staff system introduced by Scharnhorst. Linking intellect and organization the Prussian general staff became a "self-regenerating institution" that, as the historian Trevor Dupuy recognized, "automatically produced outstanding leaders."¹⁰⁵

Moltke took care that the most talented general staff officers were either appointed to the Central General Staff or augmented the judgment of the tactical commanders. Between him and the general staff officers in subordinate headquarters, Moltke established a separate line of communication to enhance his influence in the tactical decision-making. The trust in these officers' education and training at the *Kriegsakademie*, and the basis of his doctrinal instructions allowed Moltke to decentralize command and to control the Prussian armies in the sense of *Auftragstaktik*. His ability to avoid irrelevant and marginal issues kept the Prussian planning focused during the preparation of the campaign against France and built the basis for his motto "first weigh, then dare." But are these principles still relevant for today's *Bundeswehr*?

¹⁰⁴ Kessel, *Moltke*, 561.

¹⁰⁵ Dupuy, *A Genius for War*, 105.

The German general staff system – still relevant?

The German general staff system is actually both a challenge and opportunity for commanders (or superiors), general staff officers, and the *Bundeswehr*. First, commanders should deliberately use their educated, self-motivated and well organized general staff officers to enhance the efficiency of their leadership. Systematic staff work and counsel and the application of similar command and control principles, as successfully demonstrated by Moltke's three section chiefs in the royal headquarters, frequently result in similar solutions. Planning based on the same principles, establishes continuity and reliability in the armed forces and relieves commanders in all aspects of the staff work. This relief enables commanders to focus on their primary functions of command, training, education, and mission-orientated leadership, while at the same time being assured that the daily work is accomplished according to the guidelines given, and without permanent personal control.

Responsible advice provided by general staff officers also enhances the quality of leadership. The military operational environment today is broadly characterized as being complex, continuously changing, and uncertain.¹⁰⁶ This phenomenon, however, is not really new. The Franco-Prussian War, as depicted, brought along its own complexities. Moltke had to balance the technological impacts brought about by vastly improved firearms, transportation, and communications together with the rapid mobilization, deployment, and supply of larger and dispersed forces, all within the framework of

¹⁰⁶ U.S. Army Field Manual (FM) 5-0, *The Operations Process*, I-4-7. Often named causes for the complex, continuously changing, and uncertain environment are the dynamic changes in the relationship between the factors of time, space, and forces, the increasing information flow, and the emergence of new domains like cyberspace.

specific civil-military relations. Moltke's answers to these complexities were changes in strategy, doctrine, and most importantly in command and organization.

Moltke recognized that the growing complexity of warfare required more than the single genius of a commander; moreover those "stars of first magnitude," as he called them, were rare. For Clausewitz, "Genius consists in a harmonious combination of elements, in which one or the other ability may predominate, but none may be in conflict with the rest."¹⁰⁷ Clausewitz identified intellect, the moral attributes of courage, determination, ambition, and character, and special elements like grasp of topography and politics as qualities necessary for military genius. Talented general staff officers can support commanders in gaining a thorough understanding of the operational and political environment (grasp of topography and politics). Moltke was well aware that genius is more likely to develop from a group of talent rather than from an individual commander. Therefore, as Trevor Dupuy put it, Moltke "institutionalized genius" by further strengthening the Prussian general staff system.¹⁰⁸

Commanders following Moltke's example do not diminish their authority, they still retain the central position within the operational environment. Commanders must drive the planning process with their intuitive vision based on intellect, experience, and reflection. They must be aware of their natural limits, and consequently, focus the staff work to rectify personal blind spots. Therefore, commanders in the *Bundeswehr* should consistently cultivate their traditional special working relationship with principal staff officers. They have to seek advice from their general staff officers, give them the chance

¹⁰⁷ Clausewitz, *On War*, 100. In the first book of *On War* Clausewitz devoted an insightful chapter to military genius. Ibid., 100-112.

¹⁰⁸ Dupuy, *A Genius for War*, 105.

to practice providing critical-reflective and responsible recommendations, and treat them as accepted junior partners in command, rather than abusing them as particularly diligent staff workers. However, one principle is set in stone. After consulting his principal staff assistants, it is the commander who has to make the decision. No general staff officer can relieve him of this responsibility. With Moltke's words, "the King bore the responsibility and nobody could relieve him of that - but I bore the responsibility of my advice."¹⁰⁹

Second, general staff officers need to have the ambition to become junior partners in command. They have to take their responsibility to provide accurate advice more as an opportunity than as a burden. In military organizations the advancement to leadership positions is basically the product of qualification, merit, and seniority. General staff officers can compensate their lack of seniority with the quality of their counsel that correlates with the quality of a commander's decision. Thus, even young general staff officers have the opportunity to actively participate in senior military decision-making. Unfortunately the desirable ambition to perform in an excellent manner in some cases results in careerism. Streamlined and adapted general staff officers, only focused on not making a negative impression on superiors in pursuing their own advancement, however, are poor principal staff assistants. They generally do not fulfill their duty to give responsible advice, and if required, to urge superiors to make decisions. Therefore, it has to be one of the primary tasks for commanders and superiors to counteract such tendencies.

Finally, the *Bundeswehr* has to answer the questions if the German general staff system is still adequate to master the challenges in 21st century and how many resources

¹⁰⁹ Kessel, *Moltke*, 451.

should be dedicated to military education and leadership development. Critical voices within the *Bundeswehr* quite often object that the creation of a specially educated elite could endanger the cohesion in the officer corps. However, these concerns do not withstand closer examination. In the *Bundeswehr* all career line officers must go through the same selection process, and consequently do have the same chance to qualify for the general staff and admiral staff education. Furthermore, there is no isolated general staff officer corps in the *Bundeswehr*. The chance for advancement up to the rank of general or admiral remains open for all officers. Objective examinations and commonly accepted selection criteria, as well as the fact that leadership positions in the *Bundeswehr* remain open to talent and reward merit remain two essential preconditions for justifying an educational elite.

As early as 1896, Spenser Wilkinson described Moltke's educational elite as the "brain of an army."¹¹⁰ Like the human brain, the Prussian general staff was not independent but a part of an organic whole, linked to the body with a nervous system that its impulses could become effective.¹¹¹ This analogy is still up-to-date. "Entrance into the military elite," wrote Morris Jannowitz, "comes only after many years of professional education, training, and experience."¹¹² The early selection of talented officers and their education at the *Führungsakademie* gives scope for a special career path that allows general staff officers to mature by regularly changing appointments at all levels of command, at home and internationally. This special career path is the decisive factor in

¹¹⁰ Wilkinson, *The Brain of an Army*, 31.

¹¹¹ Ibid.

¹¹² Morris Janowitz, *The Professional Soldier: A social and Political Portrait* (Illinois: The Free Press of Glencoe, 1960), 125.

building versatile military thinkers with a broad perspective and a variety of experiences; able to identify and trigger the right impulses necessary, as the “brain of an army” must do.

High quality leadership, however, has not only an organizational aspect. The United States Army, for instance, officially introduced the methodological concept of *design* to the military realm with the publication of Field Manual 5-0, *The Operations Process*, in March 2010. In the field manual, *design* is defined as a “methodology for applying critical and creative thinking to understand, visualize and describe complex, ill-structured problems and develop approaches to solve them.”¹¹³ In practice the application of *design* is a holistic iterative process of three interrelated activities or spaces: framing the operational environment (what is the context in which *design* will be applied?); framing the problem (what problem is *design* attended to solve?); and the solution space (what broad, general approach will solve the problem?).¹¹⁴

Design follows the organizational theorist Russell Ackhoff’s axiom that, “We fail more often not because we fail to solve the problem we face, but we fail to face the right problem.”¹¹⁵ It provides a cognitive tool to support commanders in obtaining a better understanding of the operational environment, and consequently, to identify the right problem to solve. The methodology is based on discourse and a free flow of thinking about the environment, problem and solution space. Such a non-linear approach demands competent, creative, and critical-thinking planners. The concept also requires

¹¹³ U.S. Army Field Manual (FM) 5-0, *The Operations Process*, 3-1.

¹¹⁴ U.S. Army Field Manual (FM) 5-0, *The Operations Process*, 3-36

¹¹⁵ Russell Ackoff, *Redesigning the Future* (New York: John Wiley & Sons, 1981) quoted in Jamshid Gharajedaghi, *System Thinking: Managing Chaos and Complexity, A Platform for Designing Business Architecture*, 2nd edition (San Diego: Butterworth-Heinemann: 2006), 126.

commanders with a high intellectual discipline to channel the free flow of thinking into concrete and usable results. Finally, and probably most important, *design* requires a command culture that encourages critical thinking and discourse without being concerned that this could undermine the commander's authority.

The German general staff system would perfectly harmonize with *design*. Some *design* elements have already found their way into German military thinking. In the German Army, *Auswertung des Auftrages* (mission assessment) is the first step in the operational planning process. Here, it is common practice that the commander, his chief of staff and frequently other selected staff members frame the problem together before initiating detailed planning. This team approach does not undermine the commander's authority, rather it is an opportunity for the commander to improve his judgment, by analyzing the core of a mission, task, or problem (*wesentliche eigene Leistung*) from different perspectives. Such a command culture, trusting in the responsible and critical-reflective advice of principal staff assistants, creates a perfect basis for a methodological planning concept like *design*. *Design* supports commanders to understand and structure the effects of complexity on military operations, to identify the problem to face, and to give the right impulses. The concept has the potential to enhance the quality of decision-making. Therefore, the *Bundeswehr* should consider the implementation of *design* in close cooperation with the United States Army and other NATO-partners.

For the *Bundeswehr*, high quality and effective leadership is essential for three main reasons. First, the *Bundeswehr* is continuing to become more and more an expeditionary force, participating in several operations abroad today. The servicemen and women internationally deployed must be able to rely on sound operational planning that

addresses the right problems to solve, develops appropriate concepts of solution, and provides the resources needed to fulfill their difficult missions. The responsibility and respect for those soldiers and their missions must intrinsically motivate general staff officers to their peak performances. Their quality of advice and professional expertise leverages the mutual trust between the different levels of command, from the Ministry of Defence in Berlin down to the units employed. This mutual trust is a key prerequisite for the successful application of *Auftragstaktik*.

Second, the *Bundeswehr* represents only one instrument of German security policy. It does not operate in an operational vacuum. With regard to the complexity of the global threat environment, the array of world-wide conflicts, limited resources, and budget constraints, the utmost unity of effort in a whole of government and multinational approach is not simply desirable, it is inevitable. It is in the *Bundeswehr's* interest and responsibility to establish functional relationships with other inter-agency, governmental, non-governmental, and multinational stakeholders. This comprehensive approach demands communication of military expertise and advice horizontally to the other partners in order to improve the chance to successfully reach national military and political objectives. Broadly educated and experienced general staff officers, accustomed to think holistically and outside their specialties are of particular benefit in this process.

The third reason for the need of high quality and effective leadership is the future attractiveness of the *Bundeswehr* to prospective officers. In the light of the transition of the *Bundeswehr* to an all-volunteer force with the abolition of conscription on 30 June 2011 and demographic developments in Germany, the question of how to make military service attractive for talented and skilled young people becomes of strategic importance.

Quality of leadership and attractiveness are two sides of the same coin. The *Bundeswehr* needs young talents to sustain high quality leadership and at the same time the quality of leadership determines its attractiveness. Scharnhorst recognized these tendencies, noting that, at the time, “most families select their most incompetent sons to become officers.” This attitude is no longer acceptable to sustain modern armed forces. Fortunately, Scharnhorst also gave the answer on how to counteract such trends. Continuously strong investment in professional military education and leadership development is the key to increase the attractiveness and quality of leadership in the *Bundeswehr* to the level required in the future.

This final chapter has illustrated that with the German general staff system the *Bundeswehr* inherited a “trademark,” well suited to face the challenges of the 21st century. General staff officers support commanders in their decision-making through high quality advice, based on their broad education, special career path, and professional expertise. This major task constitutes the particular value of the German general staff system. Moltke provided a blueprint how to master increasing complexity in military affairs. He recognized the natural limitations of commanders in dealing with complexity, and consequently, based military genius on a broader foundation. Modern planning methodologies like *design* would perfectly harmonize with the principles of the German general staff system and helps commanders to understand and structure the effects of complexity on military operations. The way Moltke made use of the general staff officers in the Royal Headquarters followed the ideal to form junior partners in command and motivated these partners to highest performances. The opportunity to become a junior partner in command with early influence on senior military decision-making makes the

general staff service attractive. Furthermore, high quality leadership should enhance the attractiveness of a career in the *Bundeswehr*.

Conclusion

Scharnhorst was the architect of the reorganization of the Prussian Army in the years between 1807 and 1813. The transformation of warfare unleashed by the French Revolution showed him the deficiencies of traditional Prussian military institutions. He developed a concept of comprehensive military reforms, based upon two cornerstones – intellect and sound organization. In Scharnhorst's view, the transformation of warfare and its increasing complexity required officers with initiative, judgment, and flexibility. Consequently, these officers had to be thoroughly trained and educated. Scharnhorst reorganized Prussia's military educational organization to become an integral part of his general staff system. His goal was to select, train, and scientifically educate the best minds in the Prussian Army, and then to promote and assign them to key positions in the general staff. This combination of intellect and military organization, Scharnhorst hoped, would create the power to meet the challenge of the changing military environment.

Moltke's brilliant career was a product of Scharnhorst's educational reform concept. Moltke experienced the competitive selection process within the Prussian Army and the rigorous curriculum at the *Allgemeine Kriegsschule*. Appointments in the Central and Tactical General Staff on different levels of command sharpened his professional competence. Moltke's answer to the new quality of warfare in the wake of the industrial revolution was to further strengthen Scharnhorst's conceptual cornerstones of intellect and sound organization. The *Kriegssakademie* became the prototype of professional military education. The students who graduated from the academy filled key positions

throughout the Prussian Army and Moltke personally selected the most talented general staff officers for appointments in the Central General Staff. In doing so, Moltke created and cultivated a general staff officer's network, established the Central General Staff at the operational level of command, and enhanced the quality of Prussian tactical leadership. This network of similarly educated and highly trained general staff officers allowed Moltke to communicate broad operational guidance to subordinate commands and to provide them decentralized tactical authority.

Today's *Bundeswehr* is facing a similar challenge the Prussian Army confronted in the 19th century. In a continuous process, military affairs are becoming more and more complex. The traditional operational factors of space, time, and forces require not only to be synchronized in a multi-dimensional and non-linear way, but also to be handled with increasing speed, and in consideration of steadily growing amounts of information. Military commanders must not become overwhelmed by the vast amount of information and detail available. To cope with this challenge, commanders need to take full advantage of a competent and effective staff system, which supports and enhances their decision-making by applying modern planning methodologies like for instance *design*. Besides a profound professional knowledge, principal staff assistants require a keen awareness of the world around them and recognize how political, social, cultural, economic, and ethical factors impact on military affairs. Therefore, extensive training and education are essential. Selection of the best minds for this educational program and their assignment to key positions remain paramount to the success of an army.

The greatness of Moltke lay in the ability to master the increasing complexity of military affairs by implementing Scharnhorst's conceptual framework of a general staff

system. The analysis of Moltke's success revealed that core elements of the Prussian military reforms are not out-of-date; they are of enduring relevance for the *Bundeswehr* and other modern armed forces. The Prussian-German general staff system constitutes a precious legacy often copied in military and other realms. It becomes important now to perpetuate this legacy for the future. Today, the operational environment is too complex and politically sensitive to face it with military leaders like General von Steinmetz. Rather these challenges demand military leaders who understand the environment they are acting in and who can strike a balance between centralized control and decentralized authority. Thus, despite all austerity plans, leadership development and leadership culture must remain of upmost importance for the *Bundeswehr*.

However, one question of strategic relevance remains: How to attract enough talented young men and women for military service in an all-volunteer force? The answer to this question lies within Clausewitz's theory of the trinitarian relationship between the people, government, and army.¹¹⁶ To maintain this relationship at equilibrium defines the attractiveness and quality of armed forces. To open the sensitive debate about the future civil-military relationship in Germany becomes mandatory for the future of the *Bundeswehr*.

¹¹⁶ Clausewitz, *On War*, 89.

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